

**WIRELESS COMMUNICATION SYSTEM WITH A SUPPLEMENTAL
COMMUNICATION SUB-SYSTEM**

ABSTRACT OF THE DISCLOSURE

5 A wireless communication system having primary and supplemental communication sub-systems. The primary communication sub-system includes a plurality of base stations and a mobile services switching center (MSC) of the prior art. The supplemental communication sub-system includes one or more supplemental transceiver units (STUs) controlled by a supplemental switching center (SSC) having access to a public switched telephone network. Each STU has a primary
10 function and, in addition, is adapted to support (i) a wireless communication link with at least one mobile station and (ii) a wire-line communication link with the SSC. In one embodiment, an STU of the invention has a conventional TV receiver and a TV screen whose primary function is to receive and display television programs supplied over a cable network. In addition, the STU has an RF transceiver designed to support a wireless communication link with N mobile stations and an
15 interface designed to support, over the same cable network used for transmitting the television signals, a cable communication link with a service distribution node of the cable service provider, which node is configured to perform the functions of an SSC.